



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,467	05/02/2001	Gerald Steven Deeb	56322USA6A.002	6906
32692	7590	07/01/2004	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY			TARAZANO, DONALD LAWRENCE	
PO BOX 33427			ART UNIT	
ST. PAUL, MN 55133-3427			PAPER NUMBER	

1773

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/847,467

Applicant(s)

DEEB ET AL.

Examiner

D. Lawrence Tarazano

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-14,16,17 and 19-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-14,16,17 and 20-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05-02-2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3,4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 1773

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 1, 2, 4, 5, 9, 10, 11, 14, 16, 17, 20 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Palaeri et al. (6,110,570).
2. Palaeri et al. teach puncture resistant films having a multilayer structure. The films can comprise slip and anti-blocking agents (column 7, lines 40+). The multilayer films comprise heat sealable layers and the polymers have some degree of elasticity.

Art Unit: 1773

3. The puncture resistance of the films is measured in a controlled environment, which does not appear to be materially different from that pictured by the applicants in their figure I. (Column 10, lines 55+).

4. The examiner notes that the applicants have various "predetermined" limitations". Since the applicants do not have any particular requirements, the properties exhibited by the films taught by Palaeri et al. are within the realm of the possible choices so they fall within scope of the claims.

5. Claims 11, 2, 4, 5-14, 16, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Brew et al. (5,667,902).

6. Brew et al. teach three-layer films comprising a core layer including hydrocarbon resin (an adhesive sticky material), and surface layers comprising silicone oil, (a migratory lubricant.) The inclusion of the hydrocarbon resin improves the mechanical properties of the film. (column 2, lines 17-24 and 34-44) and (column 5, lines 55+)

7. While there is no mention of an elastomeric material, the examiner takes the position that all materials have some degree of elastic properties and thus meet the limitations of the claims.

8. Claims 1, 2, 4, 7, 8-14, 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hall et al. (AU-8425267)

9. Hall et al. teach three-layer laminates having a self healing core layer of an adhesive material (see claim 1).

Art Unit: 1773

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 20-23 rejected under 35 U.S.C. 103(a) as being unpatentable over Cheung et al (6,276,095) in view of ASTM 1709-03 and the polyethylene data sheet

12. Cheung et al teach elastomeric films which can have a multilayer structure (e.g. three-layer) (column 20, lines 32-33. ). The films can be formed by coextrusion in which sealable polymers such LDPE, LLDPE, ULDPE, EVA, and EAA are used to form the additional layers. They teach that slip and anti-blocking additives can be used, but they are silent regarding the specific materials used.

13. The data sheet describes polyethylene used in film production having a particular drop impact strength. Impact strength is measured by dropping an object through a stretched film.

14. The examiner takes the position that the dart could be produced from a variety of material. In the absence of unexpected results with respect to the choice of polypropylene for the impacting material, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used polypropylene as the impact material since polypropylene is a hard moldable material which could easily be shaped into a impact dart.

15. Claims 1, 2, 4-14, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheung et al (6,276,095) alone or in view of Brew et al. (5,667,902).

Art Unit: 1773

16. Cheung et al teach elastomeric films which can have a multilayer structure (e.g. three-layer) (column 20, lines 32-33. ). The films can be formed by coextrusion in which sealable polymers such LDPE, LLDPE, ULDPE, EVA, and EAA are used to form the additional layers. They teach that slip and anti-blocking additives can be used, but they are silent regarding the specific materials used.

17. Brew et al. teach that silicone oil can be used in the skin layers of film in an amount effective to maintain a low coefficient friction of the exposed surface of the skin layers (slip agent). The examiner notes that “migratory slip agents” include a number of non-silicone materials and that other materials such as “higher aliphatic acid esters, waxes, and metallic soaps” (Brew 5,667,902) are alternative materials which function in this capacity

18. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used silicone oil or other slip aids as taught by Brew et al. in the films taught by Cheung et al. so that the films would have good slip properties.

19. Cheung et al. also teach that tackifiers may be added to the films (column 20, lines 46+). Tackifiers are adhesive resins that are added to improve the cling properties of a film. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have added tackifiers to the films taught by Cheung et al. in order to produce films with cling properties.

### ***Response to Arguments***

20. The applicants arguments filed 4/5/2004 are not persuasive. The examiner maintains that the prior art rejections stand. The applicants argue various points of the references especially

Art Unit: 1773

those related to the resealability of the films. However, merely state that the films have controlled resealability, but there is no level or resealability recited or a real requirement that the films be resealable. Controlling it may mean that the films do not reseal, or that they do. The level of control can be anything.

21. From the specification:

22. As used herein, resealability" refers to the ability of a film to reduce the size of a hole in the film at a puncture site up to the point of completely closing the puncture site. In embodiments where resealability is desired, preferably, a hole that is created in the film by a puncturing object reseals such that the circumference of the hole is less than 50% of the circumference of the puncturing object. More preferably, the hole will decrease to less than 20% of the circumference of the puncturing object.

23. As used herein, resealability" refers to the ability of a film to form a seal around a puncturing object while it is puncturing the film.

24. The applicants state in their response that the surface layer must heal itself, that that the core layer can not function in this capacity according to the specification. The examiner does not believe that the specification requires the applicant's interpretation.

25. Claim 19 is allowable. The prior art does not suggest a film having isotropic puncture resistance, wherein one side punctures easier than the other.

### ***Conclusion***

26. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1773

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. Lawrence Tarazano whose telephone number is (571)-272-1515. The examiner can normally be reached on 8:30 to 6:00 (off every other Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul J Thibodeau can be reached on (571)-272-1516. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'DLT' with a stylized flourish above the letters.

D. Lawrence Tarazano  
Primary Examiner  
Art Unit 1773